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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,317

08/23/2006

Hakan Bergkvist

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EXAMINER

LEE, GILBERT Y

ART UNIT

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3676

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,317	Applicant(s) BERGKVIST, HAKAN	
	Examiner GILBERT Y. LEE	Art Unit 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed 2/12/09 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11, 14, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergkvist (WIPO Pub. No. WO 92/02161) in view of Fong et al. (US Patent No. 5,581,827) and Thayer (US Patent No. 2,646,577) and further in view of Ban (US Patent No. 4,063,830).

Regarding claim 1, the Bergkvist reference discloses a bed for a child (Fig. 1) comprising a ring-shaped frame (Fig. 5) and legs (21) connected to the frame (e.g. Fig. 1), as well as a sack (including 11,12,13) of flexible material mounted on the frame, which sack having the opening verge part thereof connected to the frame (Fig. 1), the frame comprising two mutually mounted frame parts (Fig. 5), the nearby branch ends of which are mutually connected to fittings (Fig. 6), including the frame being provided with one leg attachment for each leg (Fig. 5).

However, the Bergkvist reference fails to explicitly disclose the frame including turnably mounted frame parts connected to fittings which allow the frame parts to be

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folded between a first end position substantially in a common plane, and a second end position in which the frame parts are parallel and overlapping, and each leg being foldably connected to an appurtenant attachment of the frame, for foldability between a first end position supporting the frame, and a second end position, in which the legs are folded back substantially parallel to the plane of the frame parts, characterized in that the frame is provided with one leg attachment for each leg, the leg attachment having a conical shape, and that spring members are provided in order to axially pull together the end of the leg and the leg attachment into connection with each other.

The Fong et al. (hereinafter "Fong") reference, a child's bed, discloses the use of a frame lock (19).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide joints between side rails 31 and 32 of the Bergkvist reference in view of the teachings of the Fong reference in order to allow foldability to the bed and reduce the chances of misplacing parts during assembly and disassembly of the bed. The modified Bergkvist reference discloses the frame parts being folded between a first end position substantially in a common plane (e.g. Fong, Fig. 1), and a second end position in which the frame parts are parallel and overlapping (e.g. the side rails of Bergkvist will have to fold downwards when modified with the joints of Fong),

The Thayer reference, a sleeping apparatus, discloses the folding of tubular members of a sleeping apparatus (e.g. Fig. 2) through an attachment of the frame (Fig. 2), for foldability between a first end position supporting the frame (e.g. Fig. 1), and a second end position (e.g. Fig. 2), in which the legs are folded back substantially parallel

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to the plane of the frame parts (e.g. Fig. 2), the attachment having a conical shape (e.g. end of element 56 closest to element 55) for releasable attachment to leg, and spring members (62) being provided in order to axially pull together the end of the leg and the leg attachment into connection with each other (e.g. Figs. 2 and 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the Bergkvist reference with the conical shape and the spring members in view of the teachings of the Thayer reference in order to minimize the number of parts and to minimize the time and effort to assemble and disassemble the sleeping apparatus (Thayer, Col. 1, Lines 27-34).

However, the modified Bergkvist reference fails to explicitly disclose a leg end connecting to the leg attachment having a corresponding conical complementary surface.

The Ban reference, a spring actuated joint, discloses making mating surfaces of complimentary surfaces (Fig. 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to make the leg attachment and the leg have complimentary surfaces in the modified Bergkvist reference in view of the teachings of the Ban reference in order to allow for pivoting of the two members (Ban, Abstract).

Regarding claim 2, the Bergkvist reference, as modified in claim 1, discloses the sack being configured to, by a bottom (Bergkvist, 11), rest on a floor on which the legs of the erected bed rests, and wherein the bottom of the sack extends over an area that substantially corresponds to the area surrounded by the frame (Bergkvist, Fig. 2).

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Regarding claim 3, the Bergkvist reference, as modified in claim 1, discloses a mattress (Bergkvist, 27) having a bottom area corresponding to the bottom of the sack, and a rigid bottom plate (e.g. Bergkvist, 17) that is provided in order to be located between the mattress and the bottom (Bergkvist, Fig. 2) of the sack.

Regarding claim 4, the Bergkvist reference, as modified in claim 3, discloses the bottom plate having two parallel spaced-apart scoring lines (Bergkvist, Fig. 1), which are positioned in a longitudinally central area of the bottom plate and which extend perpendicularly to a longitudinal direction of the bottom plate (Bergkvist, Fig. 1).

Regarding claims 5 and 16, the Bergkvist reference, as modified in claims 1 and 15, discloses the legs when being operatively connected to the frame converge toward a common point that is centrally positioned above the central part of the frame (Bergkvist, Fig. 1).

However, the modified Bergkvist reference fails to explicitly disclose the legs sloping at an angle from 5-25°.

Discovering an optimum range of a result effective variable involves only routine skill in the art. Since applicant has not shown some unexpected result the inclusion of this limitation is considered to be a matter of mechanical expedience. It would have been obvious to one having ordinary skill in the art at the time the invention was made to slope the legs at an angle from 5-25° in the modified Bergkvist reference as a matter of mechanical expedience.

Regarding claim 6, the Bergkvist reference, as modified in claim 1, discloses the spring members being arranged to axially bias the leg against the attachment and that

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the attachment (Thayer, Col. 5, Lines 12-50), and the leg are axially united by a central flexible element (Thayer, 59) coupled to the spring member.

Regarding claim 7, the Bergkvist reference, as modified in claim 1, discloses a conical sleeve (Bergkvist, 56) fixed in the end of the tubular leg, the sleeve, on the outer circumference thereof, having a recess (e.g. Bergkvist, recess of 56 which 58 is formed to), and wherein the wall of the tubular leg is deformed for engagement in the recess of the sleeve for axial locking of the sleeve in the leg (Bergkvist, Col. 5, Lines 19-25).

Regarding claim 8, the Bergkvist reference, as modified in claim 1, discloses the folding fittings of the frame being arranged to allow the frame parts to be folded against each other into a direction in which the leg attachment of the frame parts are facing each other (e.g. the side rails of Bergkvist will have to fold downwards when modified with the joints of Fong).

Regarding claim 9, the Bergkvist reference, as modified in claim 1, discloses the free ends of the legs being connected to an adjacent portion of the sack near the bottom wall of the sack (Bergkvist, through element 26).

Regarding claim 10, the Bergkvist reference, as modified in claim 1 and as best understood, discloses the frame being rectangular (Bergkvist, Fig. 1) and the support leg (e.g. Bergkvist, 21) is connected to the respective corner area of the frame.

Regarding claim 11, the Bergkvist reference, as modified in claim 1, discloses the spring loading that is exerted by the spring member between the leg and the leg attachment thereof being chosen to produce an automatic stable connection of the leg

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and the leg attachment thereof when the direction of the leg approaches a direction of the attachment (Thayer, Col. 5, Lines 12-50).

Regarding claim 14, the modified Bergkvist reference discloses the invention substantially as claimed in claim 5.

However, the modified Bergkvist reference fails to explicitly disclose the legs sloping at an angle of approximately 15° from the vertical.

Discovering an optimum range of a result effective variable involves only routine skill in the art. Since applicant has not shown some unexpected result the inclusion of this limitation is considered to be a matter of mechanical expedience. It would have been obvious to one having ordinary skill in the art at the time the invention was made to slope the legs at an angle of approximately 15° from the vertical in the modified Bergkvist reference as a matter of mechanical expedience.

Regarding claim 15, the Bergkvist reference discloses a bed for a child (Fig. 1) comprising a ring-shaped frame (Fig. 5) and legs (21) connected to the frame (e.g. Fig. 1), as well as a sack (including 11,12,13) of flexible material mounted on the frame, which sack having the opening verge part thereof connected to the frame (Fig. 1), the frame comprising two mutually mounted frame parts (Fig. 5), the nearby branch ends of which are mutually connected to fittings (Fig. 6), including the frame being provided with one leg attachment for each leg (Fig. 5).

However, the Bergkvist reference fails to explicitly disclose the frame including turnably mounted frame parts connected to fittings which allow the frame parts to be folded between a first end position substantially in a common plane, and a second end

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position in which the frame parts are parallel and overlapping, and each leg being foldably connected to an appurtenant attachment of the frame, for foldability between a first end position supporting the frame, and a second end position, in which the legs are folded back substantially parallel to the plane of the frame parts, characterized in that the frame is provided with one leg attachment for each leg, the leg attachment having a conical shape, and that spring members are provided in order to axially pull together the end of the leg and the leg attachment into connection with each other.

The Fong et al. (hereinafter "Fong") reference, a child's bed, discloses the use of a frame lock (19).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide joints between side rails 31 and 32 of the Bergkvist reference in view of the teachings of the Fong reference in order to allow foldability to the bed and reduce the chances of misplacing parts during assembly and disassembly of the bed. The modified Bergkvist reference discloses the frame parts being folded between a first end position substantially in a common plane (e.g. Fong, Fig. 1), and a second end position in which the frame parts are parallel and overlapping (e.g. the side rails of Bergkvist will have to fold downwards when modified with the joints of Fong),

The Thayer reference, a sleeping apparatus, discloses the folding of tubular members of a sleeping apparatus (e.g. Fig. 2) through an attachment of the frame (Fig. 2), for foldability between a first end position supporting the frame (e.g. Fig. 1), and a second end position (e.g. Fig. 2), in which the legs are folded back substantially parallel to the plane of the frame parts (e.g. Fig. 2), the attachment having a conical shape (e.g.

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end of element 56 closest to element 55) for releasable attachment to the leg, and spring members (62) being provided in order to axially pull together the end of the leg and the leg attachment into connection with each other (e.g. Figs. 2 and 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the Bergkvist reference with the conical shape and the spring members in view of the teachings of the Thayer reference in order to minimize the number of parts and to minimize the time and effort to assemble and disassemble the sleeping apparatus (Thayer, Col. 1, Lines 27-34). Note that when the modified Bergkvist reference is folded, at least part of each leg will be facing the other legs.

However, the modified Bergkvist reference fails to explicitly disclose a leg end connecting to the leg attachment having a corresponding conical complementary surface.

The Ban reference, a spring actuated joint, discloses making mating surfaces of complimentary surfaces (Fig. 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to make the leg attachment and the leg have complimentary surfaces in the modified Bergkvist reference in view of the teachings of the Ban reference in order to allow for pivoting of the two members (Ban, Abstract).

Regarding claim 17, the Bergkvist reference, as modified in claim 15, discloses the spring members being configured to axially bias the leg against the leg attachment (Thayer, Col. 5, Lines 41-46), and the leg attachment and the leg being axially connected by a central flexible element (59) coupled to the spring member.

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergkvist in view of Fong and Thayer and further in view of Ban as applied to claims 1-11, 14, 15, and 17 above, and further in view of Stewart, III et al. (US Patent No. 6,588,020).

Regarding claim 12, the Bergkvist reference, as modified in claim 1, discloses the opening verge of the sack being folded over and around the frame against the outside of the sack and is correspondingly attached along the respective frame piece, except at the corner area of the frame (Bergkvist, Page 3, Lines 16-28)b including the seams (15).

However, the modified Bergkvist reference fails to explicitly disclose zippers.

The Stewart, III et al. (hereinafter "Stewart") reference, a teaching for fastening, teaches that zippers and seams are interchangeable (Col. 4, Lines 9-11).

It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the seams of the modified Bergkvist reference with zippers in view of the teachings of the Stewart reference in order to allow the sack to be released and washed.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergkvist in view of Fong and Thayer and further in view of Ban as applied to claims 1-11, 14, 15, and 17 above, and further in view of Stranski et al. (US Patent No. 5,542,151).

Regarding claim 13, the modified Bergkvist reference discloses the invention substantially as claimed in claim 1, including the folding fitting comprising two mutually equal hinge elements (Fong, 19) which are turnably arranged around a common central pivot axis normal to the plane of the hinge elements (Fong, Fig. 1).

However, the modified Bergkvist reference fails to explicitly disclose the hinge elements being axially spring-loaded into parallel and surface-extended abutment against each other and that the hinge elements having an opening each arranged at a distance from the axis and extending in a circumferential direction, and a protrusion from the plane thereof, adjacent to the opening, following in the direction of circumference, the two ends of the protrusion, which connect to the hinge-element opening, abutting against each other in the end position of the fitting, in which the frame parts are folded-out in a common plane.

The Stranski et al. (hereinafter "Stranski") reference, a joint for a playpen, discloses the hinge elements being axially spring-loaded (through element 90) into parallel and surface-extended abutment against each other and that the hinge elements having an opening (e.g. opening of 40 accepting element 60; and 140,142) from each arranged at a distance from the axis and extending in a circumferential direction (Figs. 1A and 1B), and a bulging (e.g. ribs of 40; and walls of 140,142) from the plane thereof, adjacent to the opening, following in the direction of circumference, the two ends of the bulgings, which connect to the hinge-element opening, abutting against each other in the end position of the fitting, in which the frame parts are folded-out in a common plane (Figs. 1A and 1B).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a hinge element to the modified Bergkvist reference in view of the teachings of the Stranski reference in order to provide a joint that promotes child safety by making it harder for a child to unlock with a two step process (Stranski, Col. 1, Lines 15-17).

Response to Arguments

5. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

With regards to the applicant's argument of the Thayer reference, the argument is not persuasive because the Thayer reference is used as a teaching for connecting two detachable tubular members.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GILBERT Y. LEE whose telephone number is (571)272-5894. The examiner can normally be reached on 8:00 - 4:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer H. Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer H Gay/
Supervisory Patent Examiner, Art
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Examiner, Art Unit 3676